Application No.: 09/493795

# NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

Notice under f	ıs a the i	provisions of 37 CFR 1.136(a)).
P The nu	ıcled	otide and/or amino acid sequence disclosure contained in this application does not comply with ements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):
APR 0 5 2001 E	2	This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
		This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
		A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
X		A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
	5.	The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
	6.	The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
	<u>7.</u>	Other: _
	A	pplicant Must Provide:
x	Ar	n initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
X	th	n initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into e specification.
x	A in	statement that the content of the paper and computer readable copies are the same and, where applicable, clude no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g).
	•	For questions regarding compliance to these requirements, please contact:  For Rules Interpretation, call (703) 308-4216 or (703) 308-2923  For CRF Submission Help, call (703) 308-4212  For Patentln software Program Support:  HELP DESK: (703) 739-8559, ext 508, M-F, 8 AM to 5 PM EST except holidays  Email: PATIN21HELP@uspto.gov  To purchase Patentln sofftware: (703) 306-2600  PLEASE RETURN & COPY OF THIS NOTICE WITH YOUR RESPONSE  Gabriele E. Bugaisky  AU 1653  3/15/0; (703)308-4201
		$\mathcal{A}(\mathcal{A},\mathcal{A})$

PH10

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#### RAW SEQUENCE LISTING

PATENT APPLICATION, US/09/493,795

DATE: 02/17/2000 TIME: 12:51:55

Input Set: I493795.RAW

APR 0 5 2001

This Raw Listing contains the General Information Section and up to first 5 pages.

]pp5,2-3

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           Olivera, Baldomero M.
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           Hillyard, David R.
 4
           McIntosh, J. Michael
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                                                               Corrected Diskette Needed
 5
           Jones, Robert M.
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 6
 7
     <130> FILE REFERENCE: Alphas 2
 8
     <140> CURRENT APPLICATION NUMBER: US/09/493,795
 9
     <141> CURRENT FILING DATE: 2000-01-28
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26
27
           halo-Trp or any unnatural aromatic amino acid.
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           Thr, Arg, ornithine, homoarginine, Lys,
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PAGE:

#### RAW SEQUENCE LISTING

PATENT APPLICATION US/09/493,795

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45
46
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           Asp, Glu, Gla, Arg, ornithine, homoarginine, Lys,
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50
           N, N, N-trimethyl-Lys or
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79
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84
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```

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           3
                               RAW SEQUENCE LISTING
                                                                             DATE: 02/17/2000
                               PATENT APPLICATION US/09/493,795
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                                                                 Input Set: I493795.RAW
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                   N,N,N-trimethyl-Lys or any unnatural basic amino
        96
                   acid.
             <400> SEQUENCE: 1 /
        97
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       114
                   is des-Xaa, Gly, Ala, Asp, Glu, Gla, Pro or
       115
                   hydroxy-Pro.
       116
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       118
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       125
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                   acid, Tyr, nor-Tyr, mono-halo-Tyr, di-halo-Tyr,
       129
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       130
                   unnatural hydroxy
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       140
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       143
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```

mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,

144

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158
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166
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167
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176
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180
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181
            amino acid; Xaa at residue 15 is Asn, Pro,
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            hydroxy-Pro, Gln, Ser, Thr,
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188
            unnatural basic amino acid, Tyr, nor-Tyr,
189
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            O-phospho-Tyr, nitro-Tyr
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194
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#### RAW SEQUENCE LISTING

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Input Set: **I493795.RAW** 

```
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197
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            Arg, ornithine, homoarginine, Lys, N-methyl-Lys,
204
205
            N, N-dimethyl-Lys, N, N, N-trimethyl-Lys, any
206
            unnatural
207
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208
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211
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213
            amino acid; Xaa at residue 19 is des-Xaa, Gly,
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238
            acid.
239
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                                                  10
                                                                       15
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243
                          20
```

Please Note: 210> SEQ ID NO 3

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

p)I

### VERIFICATION SUMMARYDATE: 02/17/2000PATENT APPLICATION US/09/493,795TIME: 12:51:55

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	-	- <b></b> -			·	. <b></b>		 							·			
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							required	Xaa										
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							required	Asp	Xaa	Cys	Cys	Arg	Arg	Xaa	Xaa	Cys	Thr	$\mathbf{L}$
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							required	Xaa	Gln	Cys	Cys	Ser	His	Xaa	Ala	Cys	Asn	Ī
							required	Xaa	Gln	Cys	Cys	Ser	His	Xaa	Ala	Cys	Asn	v
							required	Gly	Gly	Cys	Cys	Ser	His	Xaa	Ala	Cys	Ala	V
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							required	Gly	Cys	Cys	Ser	Asn	Xaa	Ala	Cys	Ala	Gly	A
							required	Gly	Cys	Cys	Ser	Arg	Xaa	Ala	Cys	Ile	Ala	A
							required								_		Val	
							required	Gly	Gly	Cys	Cys	Ser	Phe	Xaa	Ala	Cys	Arg	X
1037 W	"	'N" (	or	"Xaa"	used:	Feature	required	Xaa	Xaa	Cys	Cys	Ser	Asp	Xaa	Arg	Cys	Asn	S

## VERIFICATION SUMMARY DATE: 02/17/2000 PATENT APPLICATION US/09/493,795 TIME: 12:51:55

Line ?	Erre	or/W	Varning	3				Orig	jinal	l Tex	ιt							
			· <b></b>								. <b></b>		<b>-</b>					
						required				_	_		_		Arg	_		
						required				_	_		_		Arg	_		
						required		_	_	_		_			Cys			
						required				_	_		•		Ala	_		
						required		_	_	_	Ser	Xaa	Phe	Asp	Cys	Arg	Met	M
						required		-	Xaa	_								
						required		_	-	_	_				Ala	_	_	
						required			_	_	_				Val	_		
						required		Ser	Ala	Thr	Cys	Cys	Asn	Xaa	Xaa	Xaa	Cys	Х
						required			-	_					Cys			
						required		Asn	Ala	Xaa	Cys	Cys	Xaa	Xaa	Xaa	Xaa	Cys	X
						required		Gly	Cys	Cys	Xaa	Asn	Xaa	Val	Cys	Xaa	Xaa	X
						required		Xaa	Xaa	Xaa	Gly	Cys	Cys	Arg	His	Xaa	Ala	С
2874 W	"N"	or	"Xaa"	used:	Feature	required		Cys	Cys	Ala	Asp	Xaa	Asp	Cys	Arg	Phe	Arg	Х
						required		Gly	Cys	Cys	Xaa	Asn	Xaa	Ser	Cys	Xaa	Xaa	Х
						required		Xaa										
						required	·	Cys	Cys	Ser	Asn	Xaa	Thr	Cys	Xaa	Xaa	Thr	X
						required		Cys	Cys	Ala	Asn	Xaa	Ile	Cys	Xaa	Asn	Thr	X
						required		Cys	Cys	Asn	Asn	Xaa	Thr	Cys	Xaa	Xaa	Thr	X
2968 W	"N"	or	"Xaa"	used:	Feature	required		Cys	Cys	Ser	Asn	Xaa	Val	Cys	Xaa	Xaa	Thr	X
2987 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Gly	Cys	Cys	Ser	Xaa	Xaa	Xaa	Cys	Ile	Α
2999 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Cys	Cys	Ser	His	Xaa	Val	Cys	Ser	Ala	M
3018 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Cys	Cys	Xaa	Asn	Xaa	Xaa	Cys	Gly	Ala	<b>s</b> · ·
3032 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Cys	Cys	Ser	Xaa	Xaa	Xaa	Cys	Phe	Ala	T
3046 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Gly	Cys	Cys	Ser	Xaa	Xaa	Xaa	Cys	Ile	A
3061 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Gly	Cys	Cys	Ser	Xaa	Xaa	Xaa	Cys	Ile	A
						required		Asp	Cys	Cys	Ser	Asn	Xaa	Xaa	Cys	Ser	Gln	Α
3084 W	"N"	or	"Xaa"	used:	Feature	required		Asp	Cys	Cys	Ser	Asn	Xaa	Xaa	Cys	Ala	His	A
3097 W	"N"	or	"Xaa"	used:	Feature	required		Xaa	Cys	Cys	Thr	Asn	Xaa	Val	Cys	His	Ala	X
3111 W	"N"	or	"Xaa"	used:	Feature	required		Gly	Cys	Cys	Ser	Asn	Xaa	Val	Cys	His	Leu	X
						required		Xaa	Cys	Cys	Thr	Asn	Xaa	Val	Cys	His	Val	X
						required		Xaa	Xaa	Cys	Cys	Ser	Xaa	Xaa	Ala	Cys	Asn	r .
						required				_	_		_		Arg	_		
						required		Leu	Asn	Cys	Cys	Met	Ile	Xaa	Xaa	Cys	Xaa	X
						required		-		Xaa		_						
						required				_	_	_	_	Leu	Ile	Xaa	Cys	L
						required			_			Val						
						required			_	_	-		Val	Thr	Xaa	Cys	Xaa	X
						required		-		Xaa		-						
						required		_		-	-				Ala	_	_	
						required		Leu	Asn	Cys	Cys	Ser	Ile	Xaa	Gly	Cys	Xaa	Α
						required		-		Xaa		_						
						required		_	-	_	_				Val	_		
						required		_	_	-	_				Val	-		
						required									Cys			
						required									Ala			
						required			_		-				Ala			
						required				-	_			_	Xaa	_	Xaa	I
						required						_			Thr			
3374 W	"N"	or	"Xaa"	used:	Feature	required		Xaa	Asn	Cys	Cys	ser	Ile	Xaa	Gly	Cys	Xaa	Х
																•		

### VERIFICATION SUMMARY PATENT APPLICATION US/09/493,795 TIME: 12:51:55

DATE: 02/17/2000

Line ? Error/Warning	Original Text
3376 W "N" or "Xaa" used: Feature required	Cys Ser Xaa Val Arg
3388 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asn Xaa Val Cys His Leu X
3402 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asn Xaa Ile Cys Xaa Phe A
3422 W "N" or "Xaa" used: Feature required	Xaa Cys Cys Ser Gln Xaa Xaa Cys Arg Xaa X
3434 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Ala Gly A
3445 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ala Val Xaa Ser Cys Arg Leu A
3457 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Asn Val A
3470 W "N" or "Xaa" used: Feature required	Thr Xaa Xaa Xaa Cys Cys Xaa Asn Xaa Xaa C
3485 W "N" or "Xaa" used: Feature required	Asp Ala Cys Cys Ser Asp Xaa Arg Cys Ser G
3498 W "N" or "Xaa" used: Feature required	Xaa Asp Cys Cys Ser Asp Xaa Arg Cys Ser V
3510 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Ala Gly S
3522 W "N" or "Xaa" used: Feature required	Xaa Asp Cys Cys Ser Asp Xaa Arg Cys Ser V
3534 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Ala Gly A
3548 W "N" or "Xaa" used: Feature required	Gly Cys Cys Gly Asn Xaa Ser Cys Ser Ile H
3561 W "N" or "Xaa" used: Feature required	Thr Asp Ser Xaa Xaa Cys Cys Leu Asp Ser A
3577 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asn Xaa Xaa Cys Xaa Ala A
3589 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Ser Val A
3608 W "N" or "Xaa" used: Feature required	Gly Xaa Cys Cys Ile Asn Asp Ala Cys Arg S
3623 W "N" or "Xaa" used: Feature required	Gly Cys Cys Xaa Asn Ile Ala Cys Arg Ile A
.3643 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Val Cys Arg Phe A
3659 W "N" or "Xaa" used: Feature required	Asp Xaa Cys Cys Ala Ser Xaa Xaa Cys Arg L
3679 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asn Xaa Val Cys Xaa Gin A
3681 W "N" or "Xaa" used: Feature required	Arg Xaa Ser
3694 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Xaa Cys Ala Gln A
3709 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Ser Gly A
3711 W "N" or "Xaa" used: Feature required	Arg Xaa Ser
3725 W "N" or "Xaa" used: Feature required	Asp Xaa Cys Cys Ser Xaa Xaa Asp Cys Gly A
3745 W "N" or "Xaa" used: Feature required	Xaa Cys Cys Ser Gln Xaa Xaa Cys Arg Xaa X
3757 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Ala Gly A
3771 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asp Xaa Ser Cys Asn Val A
3784 W "N" or "Xaa" used: Feature required	Xaa Xaa Cys Cys Ser Asp Xaa Arg Cys Ser V
3797 W "N" or "Xaa" used: Feature required	Gly Gly Cys Cys Ser Asn Xaa Ala Cys Leu V
3809 W "N" or "Xaa" used: Feature required	Arg Asp Xaa Cys Cys Phe Asn Xaa Ala Cys A
3822 W "N" or "Xaa" used: Feature required	Cys Cys Ser Asp Xaa Ser Cys Xaa Arg Leu H
3835 W "N" or "Xaa" used: Feature required	Cys Cys Thr Asn Xaa Ala Cys Leu Val Asn A
3847 W "N" or "Xaa" used: Feature required	Asp Xaa Cys Cys Ser Asp Xaa Arg Cys His G
3859 W "N" or "Xaa" used: Feature required	Asp Cys Cys Ser His Xaa Leu Cys Arg Leu P
3879 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Val Cys Xaa Val A
3891 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Ala Cys Asn Val A
3910 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Val Cys Xaa Val A
3923 W "N" or "Xaa" used: Feature required	Gly Gly Cys Cys Ser His Xaa Ala Cys Xaa V
3936 W "N" or "Xaa" used: Feature required	Val Cys Cys Ser Asn Xaa Val Cys His Val A
3949 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser His Xaa Val Cys Asn Leu S
3963 W "N" or "Xaa" used: Feature required	Xaa Xaa Cys Cys Ser His Xaa Ala Cys Asn V
3975 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asn Xaa Ala Cys Leu Val A
3987 W "N" or "Xaa" used: Feature required	Asp Cys Cys Asp Asp Xaa Ala Cys Thr Val A
4001 W "N" or "Xaa" used: Feature required	Gly Cys Cys Ser Asn Xaa Xaa Cys Ile Ala X
4024 W "N" or "Xaa" used: Feature required	Cys Cys Thr Ile Xaa Ser Cys Xaa Xaa Xaa X
4038 W "N" or "Xaa" used: Feature required	Gly Cys Cys Gly Asn Xaa Ala Cys Ser Gly S
4357 W Invalid/Missing Amino Acid Numbering	

PAGE:

VERIFICATION SUMMARY PATENT APPLICATION US/09/493,795

DATE: 02/17/2000 TIME: 12:51:55

Input Set: I493795.RAW

Line ? Error/Warning

Original Text 

4440 W Invalid/Missing Amino Acid Numbering